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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,933	08/24/2001	David B. Lektion	RSW920010150US1	3500

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EXAMINER

SING, SIMON P

ART UNIT PAPER NUMBER

2645

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/938,933

Applicant(s)

LECTION ET AL.

Examiner

Simon Sing

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4,7,13-15 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,13,14,18 and 19 is/are allowed.
- 6) ☒ Claim(s) 7,15 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, regarding whether the rejection of claim 7 is proper stated on page 3 of the after final amendment filed on 06/16/2005 have been fully considered and are persuasive. Therefore, the final rejection has been withdrawn. However, new prior art reference was discovered and new grounds of rejections are given in this Action.

2. Applicant's arguments filed on 6/16/2006 respect to claims 15 and 20 have been fully considered but they are not persuasive.

The Applicant argues that Miyasaka does not teach a PRS (personal radio service) device encrypting positioning data to be sent to another PRS device, and Miyasaka also fails to teach only certain devices (servers 41) can access the encrypted data and others cannot.

However, the primary reference (Beason) teaches sending positioning data between PRS devices (radio data communications) without encrypting the data, and Miyasaka teaches encrypting data using an encryption key (code) before transmission. Since both Beason and Miyasaka teach radio data communications, then it is obvious to combine Beason and Miyasaky so that data in Beason can also be encrypted. It is well known in the art that with data encryption, only a receiving device (or devices) with the

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same encryption key is able to properly decode the encrypted data so that security/privacy can be ensured.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beason et al. US 6,373,430 in view of Reynolds US 5,677,837.

Beason discloses a personal radio 10 (Family Radio Service device) in figures 1 and 2, comprising:

a GPS receiver 12 (figure 2);

a radio transceiver 16 (figure 2), configured to modulate and transmit voice and positioning data received from said GPS receiver, and to demodulate voice and positioning data received from other personal radios (column 3, lines 26-33, 49-66; column 4, lines 22-25, 49-57); and

a visual display 30 for displaying position information based upon said position data, wherein the position data comprise the location of another personal radio. Beason teaches displaying the location of another personal radio on the display 30, which enable a group of campers or hiker to locate each other quickly (column 1, lines 49-62; column 4, lines 49-57). Beason teaches that the position data comprises latitude and

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longitude information (column 1, lines 37-42), but fails to specifically teach that the location of the another personal radio comprise range and bearing.

However, Reynolds discloses a location information system in figures 1 and 2. Reynolds teaches that from the latitude and longitude information of two devices, such a destination 20 and an automobile, relative location information, such as range and bearing can be derived, and display on a cellular telephone (radio) (column 1, lines 48-63; column 2, lines 61-66; column 4, lines 24-31, 55-58; column 5, lines 1-2, 12-16, 30-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Beason's reference with the teaching of Reynolds, so that the location information of another personal radio (or other radios) would have been comprised range and bearing, because such modification would have enabled the Beason's device to display relative location information in addition to location information.

4. Claims 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beason et al. US 6,373,430 in view of Miyasaka et al. US Patent Publication No. 2001/0018635.

Beason discloses a personal radio 10 in figure 1 (column 3, lines 26-46). Beason teaches:

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establishing a private, two way, short range voice communication link with at least one other personal radio (column 4, lines 48-57; column 3, lines 49-66);

establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter (column 3, lines 49-57; column 4, lines 22-31, 49-57);

processing said positioning data to determine location based information associated with the personal radio (column 4, lines 12-13);

modulating (it is inherent that in radio communications, data must be modulated onto a RF carrier for transmission) the positioning data onto a carrier (RF) signal which can be transmitted over two way short range voice communication link to other personal radios (column 4, lines 49-57);

receiving modulated positioning data from said other personal radios and demodulating said received modulated positioning data (column 4, lines 49-57, 3-15);

processing said modulated positioning to determine further location-based information associated with said other personal radios (column 4, lines 49-57, 3-15);  
and

displaying said location based information (personal radio 10) and further location-based (other personal radios) in the personal radio 10, whereby said displaying of said location-based information and further location-based information can indicate a relative position of each other (column 4, lines 3-15, 49-57).

Beason teaches modulating (inherency) the positioning data onto a carrier signal, but fails to teach encoding the data using a privacy code.

However, Miyasaka discloses a radio data communication apparatus in figure 1. Miyasaka teaches encoding data with an encrypting key (private code) for radio transmission (paragraph 0055-0057). Miyasaka further teaches that radio links can be Bluetooth or other short distance radio communication means (paragraph 0080).

Therefore, since both Beason and Miyasaka teaches radio data communications, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Beason's reference with the teaching of Miyasaka, so that the location information data would have been encoded (encrypted) before transmission, because such modification would have provided a secured data communications over airways.

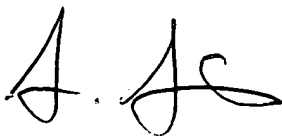
***Allowable Subject Matter***

5. Claims 4, 13, 14, 18 and 19 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter: Beason (US 6,373,430) teaches transmitting GPS location data between personal radios, but fails to teach an identification tone generator for generating identification tone(s), and encoding the location data in the identification tone(s). Ayoub et al. (US 6,477,363) teaches a mobile device 1 which encodes received GPS position data into a set of audio tones representing said position data (claim 1). Ayoub fails to teach that the audio tones are identification tones. Both Beason and Ayoub fail to teach encoding location (or position) data into an identification tone (or tones).

**Conclusion**

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is 571-272-7545. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 (571-273-8300 after 07/15/2005). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.



S. Sing

06/29/2005

FAN TSANG  
SUPERVISORY PATENT EXAMINER  
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